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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,643	02/20/2002	Kamal Emile Dimitri	TUC920010127US1	3997

7590 05/20/2004

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EXAMINER

THOMAS, SHANE M

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 05/20/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,643

Applicant(s)

DIMITRI ET AL.

Examiner

Shane M Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

The Examiner's objections to the claims have been respectfully withdrawn hereto.

Claim Rejections - 35 USC § 102

The Examiner's rejections under §102(b) have been respectfully withdrawn due to amendments made by the Applicant.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1,2,4,6,7,10-12,15-20,22-24,27,28,30, and 33 are rejected under 35 U.S.C. 102(a) as being anticipated by Kern et al. (U.S. Patent No. 6,202,124).

As per claim 1, Applicant claims:

one or more hard disks individually disposed in one or more portable hard disk drive units;

Kern teaches a data storage and retrieval system in figure 2 and states in column 3, line 67 - column 4, line 1 that the digital data storage devices 206-207 can be a magnetic disk drive (hard disk drive unit). The Examiner is considering the --hard disk-- to be the magnetic media

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that contains stored data and the --hard disk drive unit-- to comprise the hard disk and the casing that encompasses the hard disk. The Examiner is further considering the hard disk drive units to be --portable-- since, as is known, the form factor of magnetic disk drives is roughly 30 square inches and weighs only a couple of pounds, which is easy portable.

Applicant claims:

One or more moveable accessors;

As is known in the art, magnetic hard disks comprise magnetic read/write heads that access the data contained on the magnetic surfaces of the disk. The Examiner is considering these read/write heads to be --moveable accessors-- since they move across the disks' surfaces and access data.

Applicant claims:

one or more first servers, wherein each of said one or more first servers comprises a first operating system and a storage management program;

Kern shows a --first server--, host device 202, in figure 2 and teaches that --first server-- 202 can comprise a MVS operating system (column 3, lines 40-43). Further --first server-- 202 comprises --storage and management means-- (elements 212 and 214 of figure 2). Refer to column 3, lines 50-54.

Applicant claims:

a first information transfer station, wherein one or more of said one or more portable hard disk drive units can be releaseably coupled to said first information transfer station;

Kern shows a --first information transfer station-- controller 205 in figure 2. Digital data storage device 207 can comprises a --portable-- magnetic disk drive, as taught above. Further,

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the Examiner is considering the magnetic disk drive 207 to be --releaseably coupled-- to the --first information transfer station-- 205 since, as is known in the art, hard disk drives are connected to a system by a communication cable that transfers data to and from the hard disk drive and a power cable for supplying power to the hard disk drive. Thus it can be seen that the hard disk drive unit can be --released-- from the system by --uncoupling-- the communication and power cables.

Applicant claims:

a first communication link interconnecting said one or more first servers and said first information transfer station;

Kern shows a --first communication link-- between --first information transfer station-- 205 and first server 202 in figure 2. Kern states in column 3, lines 63-65 that the link can be any suitable communication link.

Applicant claims:

one or more second servers, wherein each of said one or more second servers comprises a second operating system, and wherein said one or more second servers do not comprise a storage management means;

Kern shows a second server, outboard data manager (herein ODM) 216 in figure 2, and states in column 4, lines 10-13, that the ODM oversees all data transfers. Thus the Examiner is considering the system that regulates the transfer operations performed by the ODM, that resides within the ODM, to be an --operating system--. Further, Kern states in column 4, lines 29-35, that in one embodiment a powerful controller can comprise the ODM. Such a controller can comprise an AIX or UNIX operating system. As can be seen in figure 2, the --second server--

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does *not* comprise a storage management means. The storage management means (212 and 214) can be seen as being only communicatively connected to --first server--202 in figure 2.

Applicant claims:

a second information transfer station, wherein one or more of said one or more portable hard disk drive units can be releaseably coupled to said second information transfer station;

Kern shows a --second information transfer station-- 204 in figure 2 that is --releaseably coupled to digital storage device (which can be a portable hard drive unit) 206, for the same reasoning as portable hard drive unit 207 is --releaseably coupled-- to --first information transfer station-- 205, as discussed above.

Applicant claims:

a second communication link interconnecting said one or more second servers and said second information transfer station.

Kern shows in figure 2, a second communication link between second server 216 and second information transfer station 204. Refer again to column 3, lines 63-65 for the type of communication links which Kern teaches can be used in his data storage and retrieval system.

As per claims 2 and 4, Application claims:

wherein said [first, second] information transfer station comprises one or more information transfer slots

The Examiner is considering the first information transfer station 205 to have an information transfer slot, which comprises all necessary cable connections to the controller 205 in order for the controller 205 to perform all necessary functionality. For example, as stated above, the typical hard disk drive is known to have a communication slot - for connecting a

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communication cable that transfers data to and from a controller - and a power slot for connecting the hard disk to a power source. Thus, a controller 205 must also comprise a communication slot which connects the communication cable to the hard disk 207 in order to send and retrieve data from the hard disk 207. Therefore, the Examiner is considering the --first information transfer station-- 205 as comprising an information transfer slot which comprises connections for all necessary cables. As per the rejection for claim 4, the same rejection applies with the use of --second information transfer station-- 204 and hard disk drive 206.

As per claims 6 and 7, Applicant claims:

a [first, second] memory device interconnected with said [first, second] communication link.

Kern shows a --first memory device-- 207 connected to the --first communication link--, which connects first information transfer station 205 to the --first memory device--, and a --second memory device-- 206 connected to the --second communication link--, which connects second information transfer station 204 to the --second memory device--.

As per claims 10 and 22, Applicant claims:

one or more hard disks individually disposed in one or more portable hard disk drive units, a first information transfer station capable of communication with one or more first servers, and a second information transfer station capable of communication with one or more second servers;

Kern teaches such a system as shown in figure 2 and described above in the rejection of claim 1.

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Applicant claims:

receiving a request from said one or more first servers to perform a disk operation on a designated one of said one or more hard disks, wherein said one or more first servers each comprises a storage and management program

Kern teaches in column 5, line 59 - column 5, line 6 that first server 202 generates a request (step 502, figure 5) to perform a data transfer request (disk operation) on one of the storage devices 206-207. Further, as stated in the rejection of claim 1, first server 202, comprises a storage and management program which utilizes catalog 212 and metadata 214.

Applicant claims:

releaseably coupling said designated hard disk to said second information transfer station;

As stated in the rejection for claim 1, the hard disks 206 and 207 are being considered releaseable coupled to both first and second information transfer stations 204 and 205 since hard disks can be removed from a system by removing their power and communication cables

Applicant claims:

performing said disk operation using said one or more second servers.

Kern states in column 6, lines 27-32, that second server (ODM) 216 performs the disk operation.

Applicant claims:

Wherein said one or more second servers do not comprise a storage management program

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As stated in the rejection for claim 1, above, only the first server 202 contains a storage management program, utilizing catalog 212 and metadata 214.

Further regarding claim 22, Applicant claims:

computer useable medium having computer readable program code disposed therein for performing a disk operation

Kern states in column 5, lines 27-37, that second server 216 comprises computer readable code for performing disk operations.

As per claims 11 and 23, Applicant claims:

wherein said disk operation comprises formatting said designated hard disk.

Kern states in column 5, line 66, that a disk operation to be performed by the second server 216 may be a format operation.

As per claims 12 and 24, Applicant claims:

wherein said disk operation comprises defragmenting said designated hard disk.

Kern states in column 6, line 6, that a disk operation to be performed by the second server 216 may be a defragment operation.

As per claims 15 and 27, Applicant claims:

one or more hard disks individually disposed in one or more portable hard disk drive units, a first information transfer station capable of communication with one or more first servers, and a second information transfer station capable of communication with one or more second servers

Rejection follows the rejection of claim 1, above.

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Applicant claims:

receiving from said one or more first servers a request to retrieve information stored on one or more of said one or more hard disks; wherein said one or more first servers each comprises a storage and management program

Kern states in column 7, lines 23-37 that first server 202 can issue a copy request (which retrieves information from a source hard disk drive 206 or 207). First server 202 contains a storage and management program as stated above in claims 1's rejection.

Applicant claims:

selecting one of said one or more hard disks;

Column 7, lines 23-37 teaches selecting a target hard disk

Applicant claims:

releaseably coupling said selected hard disk to said second information transfer station;

As stated above in the rejection for claim 1, hard disk drives 206 and 207 are considered by the Examiner to be --releaseably coupled--.

Applicant claims:

Determining using said one or more second servers if said information is stored on said selected hard disk;

The Examiner is interpreting the phrase --determining using-- to mean --trying to determine-- if using the second server(s) is necessary. First server 202 uses catalog 212 and metadata 214 to manage files (column 3, lines 50-59 and column 7, lines 10-12), and therefore maintains responsibility for instructing the second server 216 of the source data to which a data operation is to be performed. Thus it can be seen that if data to that is needed to be accesses is

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not contained in the storage management means 212 and 214, then it can further be seen that first server would not request operation of the second server to perform a data operation. Thus, the first servers --determines-- not to use the second server.

Applicant claims:

operative if said information is stored on said selected hard disk, releaseably coupling said selected hard disk to said first information transfer station;

An operation can then be performed on data if the data exists in the hard disk drives 206-207 as shown in figure 5, starting at step 502. As stated above in the rejection for claim 1, hard disk drives 206 and 207 are considered by the Examiner to be --releaseably coupled--.

Applicant claims:

and providing said information to said one or more first servers.

Kern teaches a case when information regarding in the data operation is provided to the first server. Column 6, lines 27-43, states that the first server can choose to perform a data operation on selected data if it determines it is necessary. It can be seen that if the host decided to perform the data operation itself, that similar transfer steps would have occurred within the first server processing much like the processing done if the second server was utilized. Such steps are taught in column 7, lines 39-56. The step of transferring data to a buffer within the second server is seen to occur in the first server when first server is performing data operations. Thus information is *provided* to said first server.

As per claims 16 and 19 Applicant claims:

wherein said one or more first servers select said one of said one or more hard disks.

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Kern states in column 7, lines 24-37 that the first server 202 selects the hard disk drives (source and target).

As per claims 17 and 20, Applicant claims:

wherein said data storage and retrieval system selects said one of said one or more hard disks.

Since the first server 202 is part of the data storage and retrieval system 200 of figure 2, the Examiner is considering the data storage and retrieval system as selecting the hard disk drives since they are selected by a component contained within the system.

As per claims 18 and 28, Applicant claims:

copying said information from said selected hard disk to said one or more second servers; designating one or more of said one or more hard disks; releaseably coupling said one or more designated hard disks to said second information transfer station; and copying said information on said one or more designated hard disks.

Kern shows the steps for copying data in figure 5 and column 7, lines 38-56.

Selected data is copied from the source disk to a buffer within the second server 216 and then to a designated target disk. As stated above in the rejection for claim 1, hard disk drives 206 and 207 are considered by the Examiner to be --releaseably coupled--.

As per claims 30 and 33, Applicant states:

wherein said first data storage library is capable of communication with one or more first servers and comprises one or more first portable data storage media and a first information transfer station capable of communication with one or more second servers, and wherein said second data storage library is capable of communication with said one or more first servers and

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comprises one or more second portable data storage media and a second information transfer station capable of communication with said one or more second servers;

The Examiner is considering hard disk drives 206-207 as being part of respective first and second libraries since Kern teaches in column 1, lines 40-42, that the source and target devices can be libraries.

Applicant states:

receiving a request from said one or more first servers to transfer information stored on one or more designated first portable data storage media to one or more designated second portable data storage media;

Kern teaches a method to copy data from a designed first portable data storage media (see rejection of claim 1 for Examiner's --portability-- argument) to a designated second portable storage media in column 7, lines 23-56. First server 202 sends a request to copy in step 502.

Applicant claims:

Wherein said one or more first servers each comprises a storage management program

Refer to the rejection of claim 1.

releaseably coupling said one or more designated first portable data storage media to said first information transfer station;

Refer to the rejection for claim 1.

copying said information by said one or more second servers;

Copying of data is performed by the second server, as Kern teaches in column 7, lines 40-56.

Applicant claims:

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releaseably coupling said one or more designated second portable data storage media to said second information transfer station;

Refer to the rejection for claim 1.

and writing said information on said one or more designated second portable data storage media.

Data is written to the designated second portable data storage media (target device) in column 7, lines 47-48, of Kern.

Claim Rejections - 35 USC § 103

The Examiner's rejections under §103(a) have been respectfully withdrawn due to amendments made by the Applicant.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kern et al. (U.S. Patent No. 6,202,124) in view of Osten (U.S. Patent No. 5,948,075).

As per claims 3 and 5, Applicant claims:

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wherein each of said one or more[first, second] information transfer slots comprises a backplane, an information connector disposed on said backplane, and a power connector disposed on said backplane.

While it would have been obvious by one having ordinary skill in the art to have seen that first transfer station 205 would have comprised a information connector so that could transfer data to and from hard disk drive unit 207 and a power connector so that controller would physically performs its functions, the Examiner is utilizing the Osten reference in order to further support this obvious feature of Kern. Osten teaches a backplane for use in DASD system, which is used to couple a DASD to the DASD enclosure. The backplane is comprised of a power connector 34 and an information connector 38 that is used to transmit data to and from the DASD (column 3, lines 39-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine data storage and retrieval system of Kern with the teaching of Osten in order to have been able to use a hard disk as the portable media device as suggested column 3, line 67 - column 4, line 1 of Kern. The teaching of the backplane would have allowed the controller 205 of Kern to have performed its function of data to have been read or written to/from the hard disk via the information connector that connects the controller to the hard disk drive 207. As per the rejection for claim 5, the same rejection applies with the use of --second information transfer station-- 204 and hard disk drive 206.

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Claims 8, 13, 14, 25, and 26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kern et al. (U.S. Patent No. 6,202,124).

As per claim 8, Applicant claims:

wherein said one or more first servers each comprise one or more information input devices and one or more information display devices.

Kern teaches in column 3, lines 46-50, that first server 202 comprises a user input device 210. Kern further states that first server can be a personal computer or computer workstation (column 3, lines 45-46), therefore it would have been obvious to one having ordinary skill in the art to have seen that an --information display device-- (such as a monitor) would have been an obvious component of the storage and retrieval system of Kern so that a user could see what commands they are inputting to the first server in order to have prevented an input command error or the like.

As per claims 13 and 25, Applicant claims:

one or more hard disks, one or more portable hard disk drive units individually housing one of said one or more hard disks, a first information transfer station capable of communication with one or more first servers, a second information transfer station capable of communication with one or more second servers, and a transfer hard disk housed in a portable hard disk drive unit;

The rejection of the aforementioned lines follows the rejection of claim 1. The Examiner is considering the hard disk from which data is to be transferred from (such as source hard disk - figure 1 of Kern) to be the --transfer hard disk-- since data is being transferred from that particular hard disk drive to the target hard disk drive - see column 5, line 65 - column 5, line 1.

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Applicant claims:

receiving information from said one or more first servers; wherein said one or more first servers each comprises a storage management program; designating one or more of said one or more hard disks;

Kern does not specifically state where data is actually written when a request from the host to write data occurs. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have seen that since second server only comprises logic to perform disk operations, the first server 202 comprise the ability to write data to a designated hard disk drive 206-207 (which the Examiner will refer to as the transfer disk). If the first server did not have this ability, data would never get written onto and of the hard disk drives 206-207, rendering the data storage and retrieval system of Kern to be useless and there would never be data to move, copy, defragment, or restore as stated by Kern.

Applicant claims:

releaseably coupling said transfer hard disk to said first information transfer station;

As stated above in the rejection of claim 1, hard disk drives 206-207 are considered to be --releaseably coupled-- to the first and second information transfer stations 204-205.

writing said information on said transfer hard disk;

As stated above within the rejection for this claim 13, data must be written to --transfer hard disk-- at some point during operation of the storage and retrieval system of Kern or no data would ever get stored in the system.

Applicant claims:

releaseably coupling said transfer hard disk to said second information transfer station;

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As stated above in the rejection of claim 1, hard disk drives 206-207 are considered to be --releasably coupled-- to the first and second information transfer stations 204-205. The hard disk drive which contains data to be copied is being considered by the Examiner to be the --transfer disk--.

Applicant claims:

copying said information on said one or more second servers;

The Examiner is considering copying would have been done --on-- the second server since the second server is responsible for copying data from the transfer disk (206 or 207) to the target disk (206 or 207).

Applicant claims:

releaseably coupling to said second information transfer station said one or more designated hard disks; and writing said information on said one or more designated hard disks.

Although not shown, Kern states in column 4, lines 7-9, that both information transfer stations 204-205 can be connected to both hard disk drives 206-207, thus it can be seen that the designated hard disk - either 206 or 207 - is releaseably coupled to the second information transfer station as well.

As per claims 14 and 26, Applicant claims:

erasing said information from said transfer hard disk; and storing said transfer hard disk.

Kern shows in figure 5, step 518, that data is deleted (erased) from transfer disk (disk from which data was moved for a move operation). The Examiner is considering the step of

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storing the transfer disk and maintaining the transfer disk (either 206 or 207) at its current location (connected to first and second servers).

Claims 9, 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kern et al. (U.S. Patent No. 6,202,124) in view of Korngiebel et al. (U.S. Patent No. 5,416,914).

As per claim 9, Applicant claims:

An accessor comprising a gripper mechanism, an information connector disposed on said gripper mechanism, and a memory device connected to said information connector, wherein said information connector can be releaseably coupled to said first information transfer station, and wherein said information connector can be releaseably coupled to said second information transfer station.

Kern does not teach an accessor comprising a gripper mechanism used to releaseably couple an information connector on the gripper mechanism to the first and second information transfer stations. Kern does state that the storage devices used in the data storage and retrieval system may comprise one or more magnetic hard drives or *libraries*; however, the structure or operation of a library and the equipment which performs library operations (such as a gripper mechanism) is not taught by Kern. Korngiebel teaches an automatic library system which comprises a gripper mechanism (figure 4). The accessor retrieves the portable media devices from storage cells contained in the library module (111 or 112 figure 1) and attaches them to the library module so that information contained in the portable media device can be accessed (column 5, lines 7-14). Korngiebel teaches in column 15, lines 24-26 that the portable media devices can be [hard] disk drives. The Examiner is considering the --information connector-- of

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the accessor of figure 4 to be the extension part of the gripper (robot hand) since the extension part extends the gripper to the particular storage cell the accessor was instructed to place the portable media device. In essence, the extension part --connects-- the gripper to the storage cell, so that --information-- can be retrieved from the portable media device. The examiner is considering the ---memory device-- of claim 9 to be the portable memory device that is to be inserted into the particular storage cell. The portable media device is --connected-- to the gripper by the --information connector-- (extension part) of the gripper. Additionally, the Examiner is considering the digital storage devices 206 and 207 of figure 2 of Kern as being stored in storage cells to which the accessor places the portable media devices into so data within hard disk drives 206 and 207 can be accessed by the first and second servers. Thus utilizing the teaching of Korngiebal in the data storage system of Kern, it could have been seen by one having ordinary skill in the art that the accessor would have releasably coupled the portable hard disk drive units 206 and 207 to first and second information transfer stations 204 and 205. The hard disk drive units are considered by the Examiner to be --releasably coupled-- since the accessor's robot arm can grab and insert or remove the portable media devices to and from the storage cells.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the data storage and retrieval system of Kern with the teaching of an automatic library system of Korngiebel (instead of the generic library as stated by Kern (column 1, lines 40-42)) in order to have utilized a library system which enables a user to transition to another media [device of the system] on an incremental basis, since a single drive can be added to the subsystem and associated media added to the library as needed without displacing the embedded base (independent of vendor) of installed media handling processes and

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software and equipment or requiring significant modification to these. The users can also manage the usage of the media within a specific media type by creating a plurality of subsets within a particular media class. Refer to column 3, lines 59-67, of Korngiebel for this motivation. Such a system would have provided flexibility to the system of Kern in allowing different types of hard disk drives to be utilized and collectively maintained automatically by the library itself.

As per claims 21 and 29, Applicant states:

one or more hard disks individually disposed in one or more portable hard disk drive units, a first information transfer station capable of communication with one or more first servers, a second information transfer station capable of communication with one or more second servers;

The rejection follows the rejection of claim 1.

Applicant claims:

an accessor comprising a memory device and an information connector in communication with said memory device;

The rejection follows the rejection of claim 9 and claims 6 and 7, wherein the memory device is a hard disk drive 206-207.

Applicant claims:

receiving a request from said one or more first servers to transfer information to said one or more second servers

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Kerns teaches in column 7, lines 23-56 that first server 202 sends requests to transfer data to second server 216 (storing of data in second server occurs during a copy sequence when data is temporarily stored within a buffer in the second server 216).

Applicant claims:

wherein said one or more first servers each comprise a storage management program, and wherein said one or more second servers do not comprise a storage management program.

Rejection follows the rejection of claim 1.

Applicant claims:

releaseably coupling said information connector to said first information transfer station

As stated above in the rejection for claim 1, hard disk drives 206 and 207 are considered by the Examiner to be --releaseably coupled--. The information connector must be releaseably coupled to the first information transfer station since the accessor comprising the information connector is responsible for attaching the hard disk drive to the transfer station itself.

Applicant claims:

Storing said information in said memory device

Data is written to the memory device (target hard disk drive) in step 516 of figure 5.

Applicant claims:

releaseably coupling said information connector to said second information transfer station

Since the accessor is responsible for connecting all hard disk drives to the information transfer stations, it could have been seen by one of ordinary skill in the art the accessor must also releaseably couple the information connector to the second transfer station at some point in order

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to have supplied either the source or target hard disk drive so the second server can perform its function.

Applicant claims:

copying said information from said memory device to said one or more second servers.

Information is copied to a buffer within the second server 216 when copying as stated in column 7, lines 48-56).

Claims 31,32,34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kern et al. (U.S. Patent No. 6,202,124) in view of Riedel (U.S. Patent Application Publication No. 2003/0051104)

As per claims 31,32,34, and 35, Applicant claims:

wherein said [first, second] portable data storage media are selected from the group consisting of magnetic storage media, optical storage media, and electronic storage media.

Kern states in column 3, line 67 - column 4, line 3, that magnetic storage media (tapes or disk drives) or optical storage media can be used, as well as other suitable media. Kerns does not specifically state that the data storage and retrieval system of figure 2 can utilize electronic storage media. Nonetheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used an electronic storage media - such as flash memory - to store, retrieve, and copy data in accordance to the teachings of Kern. Riedel teaches in table 1 of ¶36 that flash memory is tremendous fast to both read from and write data to.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the storage and retrieval system of Kern with the

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teaching of Flash memory if Riedel in order to have increased the speed at which the system of Bern could have copying, moves, defragmented, etc data since using flash memory (electronic storage media) would have sped up data access times for storage devices 206 and 207.

Response to Amendment

As per the Applicants amendment, filed 15 March 2004, the Examiner has withdrawn all prior objections and rejections of the claims and has rejected claims 1-35 citing the teachings of Kern et al. (U.S. Patent No. 6,202,124), Korngiebel et al. (U.S. Patent No. 5,416,914), and Riedel (U.S. Patent Application Publication No. 2003/0051104)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane M Thomas whose telephone number is (703) 605-0725. The examiner can normally be reached on M-F 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt M Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shane M. Thomas



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